DETAILED ACTION

Response to Amendment

Applicant's amendments to the drawings and claims, in addition to the Request for Continued Examination, filed on 12/7/2009, are accepted and appreciated by the examiner. Applicant has added new claims 14-18 and amended each independent claim. In response, all previous objections and rejections of the drawings and claims are hereby withdrawn in favor of the following new grounds for rejection as necessitated by the change in scope of the claimed invention as presented by applicant.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 5-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Hackett (US pat 4754262).

With respect to claims 5 and 9, Hackett discloses a method and apparatus comprising:

1) A first sensor (Fig 2 item 20; *called a 'transponder' but it senses/reports a condition and thus is a 'sensor'*) powered by a line (Fig 2 item 45), the first sensor preprogrammed with a first time interval for transmitting data via the line (Fig 3 items 62-64 and column 2 lines 42-45). *Each transponder has a unique "identity number" which corresponds to a unique time delay as set by the jumpers and resistors.*

2) A second sensor (Fig 2 item 20; *there are multiple transponders*) powered by the line (Fig 2 item 45) in parallel with the first sensor, the second sensor preprogrammed with a second time interval for transmitting data via the line (Fig 3 items 62-64 and column 2 lines 42-45). *Each transponder has a unique "identity number" which corresponds to a unique time delay as set by the jumpers and resistors.*

3) A first timing sequence control system included in the first sensor (Fig 3 item 54). *Again, each transponder includes its own programmable timer to generate a unique delay.*

4) A second timing sequence control system included in the second sensor (Fig 3 item 54). *Again, each transponder includes its own programmable timer to generate a unique delay.*

5) Wherein, at a point in time of receiving a first power level (Fig 1), the first timing sequence control system is triggered and, upon being triggered, controls the transmission of the first sensor so that the first sensor transmits data via the line for the first time interval, and wherein, at a point in time of receiving the first power level, the second timing sequence control system is triggered and, upon being triggered, controls the transmission of the second sensor so that the second sensor transmits data via the line for the second time interval after the first time interval (Figs 1-2 and column 2 lines 3-17). *The controller (everything to the right of the transformer in Fig 2 more or less) transmits a synchronization signal to all transponders in the form of a voltage signal as shown in Fig 1. At the end of the synchronization, the voltage is returned to a nominal value which is a 'first power level'. At this point, each transponder waits for a period equivalent to a unique delay assigned to it before responding. The result is that each transponder responds to the same interrogation signal at different times. Because the*

transponders do not start counting until the end of the synchronization signal, which is the 'first power level', they can be said to act in response to this 'first power level'.

6) Wherein, upon being triggered, the first and second timing sequence control systems control the transmission of the first and second sensors so that the first and second sensors each transmit data via the line at least once independent of any change in a power level received by the first and second timing sequence control systems (Fig 1). *The control unit sends no further information after the synchronization signal terminates. From there each transponder responds depending only on its unique delay.*

With respect to claims 6 and 10, Hackett discloses that the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level (Fig 1 and column 2 lines 36-39). *The voltage supplied to the transponders fluctuates about a baseline (shown in Fig 1) which corresponds to the claimed 'first power level'. During communication, the voltage is alternatively raised and lowered as shown. The lowest that the voltage ever falls can be fairly said to be a 'second power level... lower than the first power level' which is always supplied.*

With respect to claims 7 and 11, Hackett discloses that the first and second sensors detect the first power level via a voltage change (Fig 1). *The synchronization signal is a voltage signal.*

With respect to claims 8 and 12, Hackett discloses that the first and second sensors (Fig 2 items 20) are connected to a control unit via the line (Fig 2 item 45), data transmission during the time between the end of the first time interval and the end of the second time interval only being provided from the sensors to the control unit, and not from the control unit to the sensors (Fig 1). *As explained above, the control unit does not send any further data after the end of the*

synchronization signal. Communication, as shown in the bottommost line of Fig 1, is from the transponders to the control unit only at this point.

With respect to claims 13, 15 and 17-18, Hackett discloses that the first and second sensors are always supplied at least a second power level, the second power level being lower than the first power level (Fig 1 and column 2 lines 36-39; *the voltage supplied to the transponders fluctuates about a baseline (shown in Fig 1) which corresponds to the claimed 'first power level'. During communication, the voltage is alternatively raised and lowered as shown. The lowest that the voltage ever falls can be fairly said to be a 'second power level... lower than the first power level' which is always supplied*), that the first and second sensors detect the first power level via a voltage change (Fig 1; *the synchronization signal is a voltage signal)*, and that the first and second sensors (Fig 2 items 20) are connected to a control unit via the line (Fig 2 item 45), data transmission during the time between the end of the first time interval and the end of the second time interval only being provided from the sensors to the control unit, and not from the control unit to the sensors (Fig 1). *As explained above, the control unit does not send any further data after the end of the synchronization signal. Communication, as shown in the bottommost line of Fig 1, is from the sensors to the control unit only at this point.*

With respect to claims 14 and 16, Hackett discloses that the first and second timing sequence control systems receive the first power level throughout the first and second time intervals (Fig 1). *As discussed above, the 'first power level' is the nominal voltage. Although the voltage raises above and falls below this level as part of the synchronization signal, the transceivers do not respond until it has stabilized to this nominal level. The final nominal level*

then identifies the end of the synchronization signal and causes the transceivers to begin the counting out of their unique delays.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN TEIXEIRA MOFFAT whose telephone number is (571)272-2255. The examiner can normally be reached on Mon-Fri, from 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jonathan C. Teixeira Moffat/
Jonathan C. Teixeira Moffat
1/6/2010